IN THE CLAIMS:

Claims 1-10 (Canceled).

Claim 11 (Currently Amended): A semiconductor laser apparatus comprising;

a heat sink made of copper and comprising;

a first planar member having first and second faces opposite to each other and having a first groove portion in the first face thereof;

a second planar member having first and second faces opposite to each other and having a second groove portion in the second face thereof;

a partition having a first surface and a second surface and disposed between the first surface of the first planar member and the second surface of the second planar member, wherein the first groove portion and the second face of the partition define a first space, the second groove portion and the first surface of the partition define a second space, and the partition has a hole for communicating between the first space and the second space;

a supply port communicating to the first space for supplying a fluid into the first space; and

a discharge port communicating to the second space for discharging a fluid from the second space;

a semiconductor laser device having first and second surfaces opposite to each other and mounted on the first face of the second planar member;

a first copper plate electrically contacting the first surface of the semiconductor laser device; [[and]]

a second copper plate electrically contacting the second surface of the first planar member such that the semiconductor laser device performs emission by application of a predetermined voltage between the first and second copper plates;

a rubber insulating member arranged in a peripheral region of the supply port in the first face of the second planar member and in a peripheral region of the discharge port in the second face of the first planar member,

wherein the hole in the partition has a sufficiently small cross-sectional area for injecting fluid into the second space such that when pressurized fluid is supplied from the supply port to the first space, the fluid is injected toward the predetermined area on which the semiconductor laser device is mounted.

Claim 12 (Previously Presented): The semiconductor laser apparatus according to claim 11, wherein the partition comprises a plurality of holes arranged at a position opposing a predetermined area in which the semiconductor laser apparatus is mounted on the first face of the second planar member and arranged along a longitudinal direction of the area and in a row.

Claim 13 (Cancelled)

Claim 14 (Cancelled)

Claim 15 (Previously Presented): The semiconductor laser apparatus according to claim 11, further comprising a guide piece for restricting a direction in which the fluid is outputted from the second space at an edge portion of the hole in the partition.

Claim 16 (Previously Presented): The semiconductor laser apparatus according to claim 11, wherein the semiconductor laser device comprises a plurality of laser emission points arranged in a predetermined direction oriented so as to be substantially parallel with the first face of the second planar member.

Claim 17 (Currently Amended): A semiconductor laser stack apparatus comprising:

first and second heat sinks made of copper and comprising:

a first planar member having first and second faces opposite to each other and having a first groove portion in the first face thereof;

a second planar member having first and second faces opposite to each other and having a second groove portion in the second face thereof;

a partition having a first surface and a second surface and disposed between the first surface of the first planar member and the second surface of the second planar member, wherein the first groove portion and the second face of the partition define a first space, the second groove portion and the first surface of the partition define a second space, and the partition has a hole for communicating between the first space and the second space;

a supply port communicating to the first space for supplying a fluid into the first space; and

a discharge port communicating to the second space for discharging a fluid from the second space;

a first semiconductor laser device having first and second surfaces opposite to each other and mounted on the first face of the second planar member of the first heat sink;

a first copper plate electrically contacting the first surface of the first semiconductor laser device;

a second copper plate electrically contacting the second face of the first planar member of the second heat sink; [[and]]

a second semiconductor laser device positioned between the second face of the first heat sink and the first face of the second heat sink, such that the first and second semiconductor laser devices perform emission by application of a predetermined voltage between the first and second copper plates; and

rubber insulating members arranged in a peripheral region of the supply port in each of the first and second heat sinks in the first face of the second planar member in each of the first and second heat sinks and in a peripheral region of the discharge port in each of the first and second heat sinks in the second face of the first planar member in each of the first and second heat sinks,

wherein each hole in each of the first and second heat sinks has a sufficiently small cross-sectional area for injecting fluid into the second space in each of the first and second heat sinks such that when a pressurized fluid is supplied from the supply ports of the first and second heat sinks to the first space in each the first and second heat sinks, the fluid is injected toward the predetermined area on which each semiconductor laser device is mounted.

Claim 18 (Currently Amended): A semiconductor laser stack apparatus according to claim 17, wherein each of the partitions in the first and second heat sink comprises a plurality of holes arranged at a position ~~aposition~~ opposing a predetermined area in which the semiconductor laser apparatus is mounted on the first face of the second planar member and arranged along a longitudinal direction of the area and in a row.

Claim 19 (Cancelled)

Claim 20 (Cancelled)

Claim 21 (Previously Presented): The semiconductor laser stack apparatus according to claim 17, wherein each of the first and second heat sinks comprises a guide piece for restricting a direction in which the fluid is outputted to the second space in each of the first and second heat sinks at an edge portion of the hole of each of the first and second heat sinks.

Claim 22 (Previously Presented): The semiconductor laser stack apparatus according to claim 17, wherein each of the first and second semiconductor laser devices comprises a plurality of laser emission points arranged in a predetermined direction oriented so as to be substantially parallel with the first face of the second planar member in each of the first and second heat sinks.

Claim 23 (Previously Presented): The semiconductor laser stack apparatus according to claim 17, further comprising a supply tube connected to both of the supply ports of the first and second heat sinks; and

a discharge tube connected to both of the discharge ports of the first and second heat sinks.